

**Astronomy TAG 1.6: Explore**  
What Happens When a Meteorite  
Hits Earth?

Name \_\_\_\_\_

Hour \_\_\_\_\_ Date \_\_\_\_\_

Read p. 47-48. Reflect p. 41

**Stop & Think**

1. Why are impacts between meteorites and Earth so violent?
2. If Earth's gravity were stronger, what effect would you expect this to have on meteoroids passing by Earth? On meteorites that strike Earth?
3. How does Earth's atmosphere affect the motion of a meteoroid?
4. Why do some meteoroids that are traveling toward Earth never hit Earth's surface?
5. Why do meteoroids glow?

Watch the video of the fire syringe simulating a meteor.

**Reflect p. 49**

1. What did you observe happen to the tissue paper inside the cylinder?
2. Do you think the gas is the source of the glow in the syringe, or the tissue paper? Why? What does this tell you about the reason(s) a meteor glows?
3. If a meteor burns up before it reaches the ground, is there any evidence that a collision took place? Why or why not?

**Update the Project Board**

**What's the Point? p. 49**

Why do more meteoroids hit the Moon than the Earth?

